

**Before the
Federal Communications Commission
WASHINGTON, D.C. 20554**

In the Matter of)	
)	
Request of Progeny LMS, LLC for Waiver and)	WT Docket No. 12-202
Limited Extension of Time)	

ORDER

Adopted: January 17, 2017

Released: January 17, 2017

By the Chief, Mobility Division, Wireless Telecommunications Bureau:

1. In this Order, the Mobility Division (Division) of the Wireless Telecommunications Bureau (Bureau) addresses the requests filed by Progeny LMS, LLC (Progeny) for waiver of Section 90.155(d)¹ of the Commission's rules and extension of time to meet the construction deadlines for its 228 900 MHz Multilateration Location and Monitoring Service (M-LMS) Economic Area (EA) licenses (Licenses).² For the reasons discussed and to the extent described below, we find it in the public interest to conditionally grant Progeny's requests for waiver of Section 90.155(d) for its B and C Block Licenses.³ We conclude that this relief will facilitate Progeny's provision of service to wireless carriers to enable them to meet the Enhanced 911 (E911) location accuracy deadlines the Commission adopted in the *Indoor Location Accuracy Order* to address a critical public safety need for improving indoor location accuracy.⁴

¹ 47 CFR § 90.155(d). Pursuant to this rule, M-LMS licensees must construct and operate a sufficient number of base stations to serve one-third and two-thirds of an EA's population within five and ten years of the initial license grant, respectively. *Id.* Alternatively, an M-LMS licensee may make a showing of substantial service for its license at the five- and ten-year benchmarks. *Id.* Also, an M-LMS license will automatically terminate as of the construction deadline if the licensee fails to meet the construction requirement. *See* 47 CFR §§ 1.946(c), 1.955(a)(2).

² *See* Progeny LMS, LLC Request for Waiver and Extension of Time, Universal Licensing System (ULS) File Nos. 0005273211 et al. (filed June 21, 2012) (2012 Waiver Request); Progeny LMS, LLC Request for Extension of Time, ULS File Nos. 0006383272 et al. (filed July 17, 2014) (2014 Waiver Request); Progeny LMS, LLC Amendment and Restatement to Requests for Waiver and Extension of Time (filed Mar. 27, 2015) (Amendment); Progeny LMS, LLC Limited Amendment to Amendment and Restatement to Requests for Waiver and Extension of Time (filed June 26, 2015) (Limited Amendment) (Amendment and Limited Amendment, together, Amended Waiver Requests). Progeny requests that the Amended Waiver Requests supersede all pending waiver and extension requests. Amendment at 2.

³ As detailed below, Progeny holds 113 B Block and 113 C Block licenses. Today, we provide certain conditional relief to Progeny's 226 B and C Block licenses previously authorized to commence commercial services. *See infra* para. 9. We separately address Progeny's A Block licenses under call signs WPQQ203 (Minneapolis-St. Paul, MN-WI-IA) and WPQQ254 (Sacramento-Yolo, CA), which are not authorized for commercial operations. *See infra* para. 36.

⁴ *See Wireless E911 Location Accuracy Requirements*, Fourth Report and Order, 30 FCC Rcd 1259 (2015) (*Indoor Location Accuracy Order*).

I. BACKGROUND

2. *Location and Monitoring Service (LMS)*. In 1995, the Commission established LMS as a new service in the 902-928 MHz band with a hierarchy of spectrum usage rights.⁵ LMS systems use non-voice radio techniques to determine the location and status of mobile radio units. Specifically, this band is allocated on a primary basis to both Federal radiolocation systems and Industrial, Scientific, and Medical (ISM) equipment.⁶ Federal fixed and mobile services are allocated on a secondary basis to Federal radiolocation systems and ISM equipment. LMS licenses are allocated on a secondary basis to Federal users and to ISM devices and may not cause interference to and must tolerate interference from these users and devices.⁷ Amateur radio operations are allocated on a secondary basis to LMS.⁸ Finally, unlicensed devices are authorized under Part 15 to use the 902-928 MHz band, but such devices are not afforded interference protection rights and may not cause harmful interference to LMS licensees, amateur operations, or other licensed systems.⁹

3. *Progeny Licenses*. Progeny won the Licenses in Auction 21, which was held in 1999,¹⁰ and the Commission granted the Licenses to Progeny in July 2000.¹¹ The Licenses had an initial five-year construction deadline of July 19, 2005. On February 15, 2005, Progeny filed a request for an extension of time to meet its five-year construction deadline for the Licenses.¹² On May 24, 2006, the Bureau granted Progeny a three-year extension of time, until July 19, 2008, to meet its five-year renewal date on the basis that Progeny had actively sought to develop M-LMS equipment and applications but the M-LMS band spectrum sharing environment had hindered licensees' ability to secure such equipment.¹³

⁵ *Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems*, Report and Order, 10 FCC Rcd 4695 (1995) (adopting rules encompassing the Automatic Vehicle Monitoring (AVM) service for which the Commission had adopted "interim" rules in 1974). M-LMS licensees are regulated under Part 90 of the Commission's rules, which generally governs radio communications systems licensed and used in the Public Safety, Industrial/Business Radio Pool, and Radiolocation Radio Services, and may provide any service consistent with the Commission's rules and the licensee's regulatory status. See 47 CFR § 90.1 *et seq.*

⁶ 47 CFR §§ 2.106, 18.301, 18.11(c).

⁷ 47 CFR § 90.353(a).

⁸ 47 CFR § 97.301.

⁹ Under Part 15 of the Commission's rules, unlicensed devices may not cause harmful interference to LMS licensees, amateur operations, or other licensed systems in the 902-928 MHz band. See 47 CFR § 90.361. However, users of Part 15 devices conforming to specified technical conditions are insulated from claims that such devices cause harmful interference to M-LMS systems in the 902-928 MHz band. *Id.*

¹⁰ The Commission auctioned M-LMS licenses in 1999 and 2001 in Auctions 21 and 39. See *Location and Monitoring Service Auction Closes, Winning Bidders in the Auction of 528 Multilateration Licenses in the Location and Monitoring Service*, Public Notice, 14 FCC Rcd 3754 (1999); *Public Coast and Location and Monitoring Service Spectrum Auction Closes, Winning Bidders Announced*, Public Notice, 16 FCC Rcd 12509 (2001).

¹¹ See, e.g., ULS File No. 0000006894 (lead call sign WPQP847); see also *Wireless Telecommunications Bureau Grants 228 Location and Monitoring Service Licenses to Progeny LMS*, Public Notice, 15 FCC Rcd 12807 (WTB 2000).

¹² See Request of Progeny LMS, LLC for Limited Waiver of Construction Requirements, ULS File Nos. 0002049041-0002094297 (filed Feb. 15, 2005).

¹³ *Request of Progeny LMS, LLC for a Three-Year Extension of the Five-Year Construction Requirement for its Multilateration Location and Monitoring Services Economic Area Licenses*, Memorandum Opinion and Order, 21 FCC Rcd 5928, 5931-32, paras. 12-13 (WTB 2006).

4. On May 1, 2008, Progeny filed a request for extension of time to meet its five- and ten-year construction requirements for the Licenses.¹⁴ On November 26, 2008, the Bureau extended Progeny's five-year and ten-year construction deadlines to July 19, 2012, and July 19, 2014, respectively.¹⁵ The Bureau noted that there was still no commercially available equipment certified for M-LMS use in the 900 MHz band.¹⁶ Further, the Bureau acknowledged that the pending M-LMS rulemaking, initiated in 2006, created regulatory uncertainty for M-LMS licensees that may have contributed to a lack of M-LMS equipment development and service deployment.¹⁷ The Bureau indicated that its extension of the respective mid-term and end-of-term construction benchmarks afforded a reasonable amount of time to develop M-LMS operations.¹⁸

5. *Progeny Limited Waiver Order*. In March 2011, Progeny requested a waiver of two M-LMS technical rules, which the Bureau and the Commission's Office of Engineering and Technology (OET) jointly granted in December 2011, enabling Progeny to utilize a more advanced and efficient version of the multilateration location service contemplated when the M-LMS rules were initially established.¹⁹ Specifically, the *Progeny Limited Waiver Order* waived the prescriptive technical requirements specified as part of the construction requirements set forth in Section 90.155(e)²⁰ to allow Progeny to take advantage of technical advances in multilateration technologies in deploying its network to provide location-based services.²¹ The order specifically granted a limited waiver of Section 90.353(g),²² which requires that M-LMS systems' "primary" operations involve the provision of vehicle location services, to enable Progeny to make its service equally available to other mobile devices, so long as it provides a location service to both vehicular and non-vehicular location services.²³ The grant was further conditioned on Progeny filing a field testing report prior to commencing commercial operations demonstrating that its M-LMS system would not cause unacceptable levels of interference to Part 15 devices that operate in the 902-928 MHz band.²⁴ The *Progeny Limited Waiver Order* provided that if the

¹⁴ See Request of Progeny LMS, LLC for Waiver and Limited Extension of Time, ULS File Nos. 0003422772-0003423231 (filed May 1, 2008).

¹⁵ The Bureau afforded the same relief to all other M-LMS licensees. See *Requests of Progeny LMS, LLC and PCS Partners, L.P. for Waiver of Multilateration Location and Monitoring Service Construction Rules*, Order, 23 FCC Rcd 17250 (WTB 2008) (*LMS Extension Order*).

¹⁶ *LMS Extension Order*, 23 FCC Rcd at 17257-58, para. 22.

¹⁷ *Id.* See also *Amendment of the Commission's Part 90 Rules in the 904-909.75 and 919.75-928 MHz Bands*, Notice of Proposed Rulemaking, 21 FCC Rcd 2809 (2006) (*M-LMS NPRM*).

¹⁸ *LMS Extension Order*, 23 FCC Rcd at 17260, para. 30.

¹⁹ See *Request by Progeny LMS, LLC for Waiver of Certain Multilateration Location and Monitoring Service Rules*, WT Docket No. 11-49, Order, 26 FCC Rcd 16878 (WTB/OET 2011) (*Progeny Limited Waiver Order*).

²⁰ 47 CFR § 90.155(e).

²¹ *Progeny Limited Waiver Order*, 26 FCC Rcd at 16884, para. 14.

²² *Id.* at 16886, para. 22; 47 CFR § 90.353(g).

²³ 47 CFR § 90.353(g).

²⁴ The report was required to detail Progeny's M-LMS system design, describe the process by which it carried out the field testing, including the particular types of Part 15 devices tested, and demonstrate that its M-LMS system would not cause unacceptable levels of interference to Part 15 devices that operate in the 902-928 MHz band. *Progeny Limited Waiver Order*, 26 FCC Rcd at 16889-90, paras. 29, 35. On January 27, 2012, Progeny filed the required Part 15 testing report. See Part 15 Test Report & M-LMS Network Description filed by Progeny, WT Docket No. 11-49 (filed Jan. 27, 2012). On October 31, 2012, Progeny filed three additional separate reports. See (continued....)

Commission determined that no significant interference issues were raised by the report, Progeny would be notified that it may commence commercial service.²⁵

6. *Progeny's 2012 Extension Request.* On June 21, 2012, Progeny filed a request for waiver or an extension of the buildout deadlines for its M-LMS licenses.²⁶ Specifically, Progeny sought the following extensions of the applicable construction requirements: (1) a ninety-day extension of the first construction deadline (until October 19, 2012) for 80 licenses covering 40 EAs;²⁷ (2) a two-year extension of both the first and second construction deadlines (until July 19, 2014 and July 19, 2016, respectively) for 40 licenses covering 20 EAs;²⁸ (3) a three-year extension of the first and second construction deadlines (until July 19, 2015 and July 19, 2017, respectively) for 60 licenses covering 30 EAs;²⁹ and (4) a four-year extension of these deadlines (until July 19, 2016 and July 19, 2018, respectively) for 48 licenses covering 25 EAs.³⁰ In its request, Progeny noted that it could not begin providing M-LMS on a commercial basis until the Commission completed its examination of the field testing report that Progeny filed on January 27, 2012, and approved commercial operations.³¹

7. Notwithstanding this extension request, Progeny filed construction notifications on August 3, 2012, for licenses in 27 of its top 40 EAs, stating that it had constructed and placed into operation a sufficient number of base stations to provide service to at least one-third of the population in the relevant EAs.³² Progeny subsequently filed notifications of construction for the remaining 13 EAs in its top 40, as well as amendments to its initial construction showing for 12 of its licenses.³³ On November 21, 2012, Progeny filed an amendment to its 2012 Waiver Request seeking a startup period of 60 days after the

(Continued from previous page)

Letter from Bruce A. Olcott, Counsel to Progeny LMS, LLC, and Laura Stefani, Counsel for Itron, to Marlene H. Dortch, Secretary, Federal Communications Commission (Oct. 31, 2012); Letter from Bruce A. Olcott, Counsel to Progeny LMS, LLC, and Lawrence J. Movshin, Counsel for Landis+Gyr, to Marlene H. Dortch, Secretary, Federal Communications Commission (Oct. 31, 2012); Letter from Bruce A. Olcott, Counsel to Progeny LMS, LLC, and Stephen E. Coran, Counsel for WISPA, to Marlene H. Dortch, Secretary, Federal Communications Commission (Oct. 31, 2012).

²⁵ *Progeny Limited Waiver Order*, 26 FCC Rcd at 16889-90, paras. 29, 35.

²⁶ 2012 Waiver Request at 1 (seeking waiver pursuant to 47 CFR § 1.925 and extension pursuant to 47 CFR § 1.946(e)).

²⁷ *See id.* at 2 & Attachment B.

²⁸ *See id.* at 2 & Attachment C.

²⁹ *See id.* at 2-3 & Attachment D.

³⁰ *See id.* at 2-3 & Attachment E. Progeny also requested a four-year extension of both deadlines for its two A Block licenses, WPQQ203 (Minneapolis-St. Paul, MN-WI-IA) and WPQQ254 (Sacramento-Yolo, CA).

³¹ *Id.* at 6-7.

³² *See, e.g.*, Progeny LMS, LLC Initial Construction Showing, Attachment, ULS File No. 0005337947 (filed Aug. 3, 2012). In the notifications, Progeny stated that it was not yet providing commercial location service to third parties due to the condition imposed in the *Progeny Limited Waiver Order*. *See id.*

³³ *See, e.g.*, Progeny LMS, LLC Initial Construction Showing, Attachment, ULS File No. 0005391776 (filed Sept. 12, 2012). *See, e.g.*, Progeny LMS, LLC Supplement to Initial Construction Showing, ULS File No. 0005337965 (filed Sept. 12, 2012). The amendments stated that initially some of its beacons had not been connected by the relevant electric utility to their power supply by the July 19, 2012 deadline, but that power was then connected and the beacons were fully operational. *Id.* According to ULS records, Progeny has filed notifications of construction for all licenses in its top 40 EAs.

Commission approves its request to commence providing commercial M-LMS service in its top 40 EAs.³⁴ In the Construction Supplement, Progeny stated that it had completed construction in 39 of its top 40 EAs – only the Orlando EA needed additional time.³⁵

8. *Comments and Replies.* On July 17, 2012, the 2012 Waiver Request was placed on Public Notice for comment.³⁶ Of the five commenting parties, only IEEE 802 directly opposed the 2012 Waiver Request.³⁷ IEEE 802 argued that M-LMS is not a viable technology given the availability of other indoor location services, such as Global Positioning System (GPS) services and Wi-Fi, and encouraged the Commission to reject the 2012 Waiver Request.³⁸ Skybridge Spectrum Foundation (Skybridge) and Telesaurus Holdings GB, LLC (Telesaurus) filed jointly, neither directly opposing nor supporting the 2012 Waiver Request, stating that M-LMS spectrum should be maintained for Intelligent Transportation Systems (ITS) and that the “IEEE 802 comments miss the point of ITS and the core nature of M-LMS.”³⁹

9. *Commission Order Permitting Progeny’s Commercial M-LMS Operations.* On June 6, 2013, following review of Progeny’s January 2012 field testing reports and Progeny’s (and others’) October 2012 joint field testing reports,⁴⁰ the Commission adopted an order allowing Progeny to commence commercial operations of its M-LMS network on Blocks B and C of its spectrum, subject to certain conditions.⁴¹ On June 21, 2013, Progeny notified the Commission that it had completed construction in each of its top 40 EAs, including Orlando, and was providing service to the required one-third of the

³⁴ See Letter from Bruce A. Olcott, Counsel, Progeny LMS, LLC, to Marlene H. Dortch, Secretary, FCC, Regarding Supplement to Progeny Request for Waiver and Limited Extension of Time, ULS File Nos. 0005273211 et al. (filed Nov. 21, 2012) (Construction Supplement).

³⁵ Progeny stated that it would need additional time to bring its initial service into operation in its Orlando EA because a nesting eagle had foreclosed access to one of the transmitter sites until the end of the nesting season in February 2013. *Id.* at 2.

³⁶ See *Wireless Telecommunications Bureau Seeks Comment on Requests by Progeny LMS, LLC, FCR, Inc., Helen Wong-Armijo, and PCS Partners, L.P. for Waiver and Extension of Time to Construct 900 MHz Multilateration Location and Monitoring Service Licenses*, Public Notice, 27 FCC Rcd 8070 (WTB 2012) (seeking comment on requests for extension of time filed by Progeny and three other M-LMS licensees). See *id.* We note that on July 18, 2012, Skybridge and Telesaurus also filed requests for extension of the construction deadlines, which were placed on Public Notice for comment on August 16, 2012. See *Wireless Telecommunications Bureau Seeks Comment on Requests by Skybridge Spectrum Foundation and Telesaurus Holdings GB for Waiver and Extension of Time to Construct 900 MHz Multilateration Location and Monitoring Service Licenses*, Public Notice, 27 FCC Rcd 9594 (WTB 2012).

³⁷ See IEEE 802 LMSC (IEEE 802) Aug. 10, 2012 Comments (IEEE 802 Comments); Itron, Inc., Landis+Gyr Company, and WISPA Aug. 16, 2012 Comments; PCS Aug. 31, 2012 Reply; Progeny Aug. 31, 2012 Reply; Telesaurus and Skybridge Aug. 31, 2012 Reply (Telesaurus/Skybridge Reply).

³⁸ See IEEE 802 Comments at 2-3.

³⁹ Telesaurus/Skybridge Reply at 2-3.

⁴⁰ See *supra* note 24.

⁴¹ See *Request by Progeny LMS, LLC for Waiver of Certain Multilateration Location and Monitoring Service Rules*, Order, 28 FCC Rcd 8555 (2013) (*Progeny Commercial Service Order*), *recon pending*. The *Progeny Commercial Service Order* limits Progeny’s authority to provide commercial M-LMS operations to its B and C Block spectrum. See *id.* at n.45.

population in each EA.⁴²

10. *M-LMS Termination Order*. On June 10, 2014, the Commission released an order terminating the *M-LMS NPRM*.⁴³ The Commission concluded that the various proposals for broad revisions of the applicable rules, including considering “whether greater opportunity can be afforded M-LMS licensees to provide services, while ensuring continued access for other licensed and unlicensed uses that share this band,” did not merit further consideration at that time.⁴⁴ The Commission further found that wholesale changes to the existing M-LMS framework that the Commission sought comment on in the *M-LMS NPRM* were not warranted and unnecessary to provide sufficient flexibility to M-LMS licensees to provide their location services.⁴⁵ The *M-LMS Termination Order* stated that based on recent developments in the M-LMS band, the Commission believed that the existing framework could provide M-LMS licensees with sufficient opportunities to provide service offerings.⁴⁶ The Commission specifically noted Progeny’s ability to commence commercial operations of its M-LMS position location service network, while co-existing with unlicensed operations in the band under the Commission’s initially established framework.⁴⁷

11. *Progeny’s 2014 Waiver Request*. On July 17, 2014, Progeny filed another request for waiver or an extension of the buildout deadlines for its M-LMS licenses, seeking to revise its 2012 Waiver Request to extend the first construction deadline for all but Progeny’s top 40 EAs, to extend the second construction deadline for its licenses in its top 40 EAs, and to revise its extension request for its second construction deadline in its remaining 75 EAs.⁴⁸ Like the 2012 Waiver Request, this revised request also divided Progeny’s licenses into four groups, each with different requested extension deadlines intended to reflect the network buildout that would coincide with the Commission’s proposed indoor location accuracy requirements.⁴⁹ Specifically, Progeny requested an extension and waiver of its second construction deadline in its 40 largest urban EAs for three years beyond the current deadline (until July 19, 2017), and for the first and second construction deadlines for the remaining three groups of licenses, until three years after the pending requested deadlines (until July 19, 2017 and 2019; July 19, 2018 and

⁴² See Letter from Bruce A. Olcott, Counsel, Progeny LMS, LLC, to Marlene H. Dortch, Secretary, FCC, Regarding Notification of Completion of Initial Buildout in 40 Economic Areas and Establishment of Website and Toll-Free Help Desk, WT Docket No. 11-49 (filed June 21, 2013) (June 2013 Letter).

⁴³ See generally *Amendment of the Commission’s Part 90 Rules in the 904-909.75 and 919.75-928 MHz Bands*, Order, 29 FCC Rcd 6361 (2014) (*M-LMS Termination Order*).

⁴⁴ *M-LMS Termination Order*, 29 FCC Rcd at 6364, para. 8 (citing *M-LMS NPRM*, 21 FCC Rcd at 2811, para. 4).

⁴⁵ *M-LMS Termination Order*, 29 FCC Rcd at 6364, para. 8.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ See 2014 Waiver Request.

⁴⁹ On February 20, 2014, the Commission adopted a Third Further Notice of Proposed Rulemaking in which it proposed updating the wireless E911 rules to add indoor location accuracy requirements. See *Wireless E911 Location Accuracy Requirements*, Third Further Notice of Proposed Rulemaking, 29 FCC Rcd 2374 (2014) (*E911 Location Accuracy FNPRM*). In the *E911 Location Accuracy FNPRM*, the Commission proposed accuracy metrics, timelines, and compliance requirements to ensure accurate indoor location information for wireless devices. Progeny’s affiliate, NextNav, LLC (NextNav), has been in discussions with wireless carriers to plan for indoor location accuracy service to wireless customers. 2014 Waiver Request at 3.

2020; and July 19, 2019 and 2021, respectively).⁵⁰ In its request, Progeny noted that it was prepared to expand and operate its network nationwide according to the timeline required to meet the needs of carriers pursuant to the Commission's then-proposed indoor location accuracy requirements.⁵¹

12. *2014 M-LMS Extension Order*. On August 29, 2014, the Division released an order addressing the requests filed by FCR, Inc. (FCR), PCS Partners, L.P. (PCSP), Helen Wong-Armijo (Wong-Armijo), Skybridge, and Telesaurus for waiver of Section 90.155(d)⁵² of the Commission's rules and extension of time to meet the construction deadline for their respective 900 MHz M-LMS EA licenses.⁵³ The Division dismissed in part as moot the request of Telesaurus, and granted in part and otherwise denied the requests of the other M-LMS licensees. In sum, the Division concluded that it was in the public interest to extend the FCR, Wong-Armijo, PCSP, Skybridge, and Telesaurus (for call sign WQGN602 only) mid-term construction deadline until September 4, 2016, and the end-of-term construction deadline until September 4, 2018.⁵⁴ The Division's primary rationale for granting the extensions was that the termination of the M-LMS rulemaking proceeding had removed regulatory uncertainty for the licensees, and that a limited extension of time at that point would permit licensees to finalize their business plans for their M-LMS licenses, including deployment of services or, if necessary, to engage in secondary market transactions.⁵⁵ Furthermore, the Division found that the M-LMS licensees did not provide adequate justification to support requests for relief of up to five and ten additional years for their respective first and second construction deadlines.⁵⁶ Skybridge and Telesaurus (together, "Havens") and PCSP filed petitions for reconsideration⁵⁷ of the *2014 M-LMS Extension Order*, which are currently pending.

13. *Commission's Wireless E911 Location Accuracy Requirements Order*. On January 29, 2015, the Commission adopted the *Indoor Location Accuracy Order*,⁵⁸ which included measures aimed at enhancing Public Safety Answering Points' (PSAPs) ability to accurately identify the location of wireless

⁵⁰ See 2014 Waiver Request at 4.

⁵¹ *Id.* at 3.

⁵² 47 CFR § 90.155(d).

⁵³ See *Requests by FCR, Inc., Progeny LMS, LLC, PCS Partners, L.P. and Helen Wong-Armijo for Waiver and Limited Extension of Time; Requests by Skybridge Spectrum Foundation and Telesaurus Holdings GB, LLC for Waiver and Limited Extension of Time*, Order, 29 FCC Rcd 10361 (WTB MD 2014) (*2014 M-LMS Extension Order*). We note that the Division dismissed all of Telesaurus' extension requests as moot except for call sign WQGN602, which received an extension under the *2014 M-LMS Extension Order*. The *2014 M-LMS Extension Order* did not address Progeny's requests for waiver and extension of time, noting that the requests would be addressed in a separate order.

⁵⁴ *2014 M-LMS Extension Order*, 29 FCC Rcd at 10367, para. 16.

⁵⁵ See *id.* at 10367, para. 17. M-LMS licensees were also cautioned that the "Bureau will not consider future requests for waiver or extension of either the interim or end-of-term construction deadline based on claims related to lack of equipment." *Id.* at 10368, para. 18.

⁵⁶ See *id.* at 10368, para. 18.

⁵⁷ See Petition for Reconsideration filed by Skybridge Spectrum Foundation and Telesaurus Holdings GB, LLC, WT Docket No. 12-229 (filed Sept. 29, 2014) (Havens Petition); Petition for Reconsideration filed by PCS Partners, L.P. (Sept. 29, 2014) (PCSP Petition).

⁵⁸ See *Indoor Location Accuracy Order*.

911 callers when indoors.⁵⁹ Increasingly, wireless 911 calls come from indoor environments where location accuracy technologies – many of which are optimized for outdoor calling – often do not work effectively. The Commission noted the “critical importance” of improved indoor location accuracy to “enhance public safety and address the need to develop alternative technological approaches to address indoor location.”⁶⁰ To close the gap in the performance of outdoor vs. indoor 911 location service, the *Indoor Location Accuracy Order* adopted measures requiring Commercial Mobile Radio Service (CMRS) providers to improve their 911 location technology and meet a timeline for implementation of solutions that will lead to improvements in horizontal and vertical location accuracy.⁶¹ Importantly, the requirements are technically feasible and technologically neutral, so that providers can choose the most effective solutions from a range of options.⁶² The Commission noted that the requirements allow sufficient time for development of applicable standards, establishment of testing mechanisms, and deployment of new location technology in both handsets and networks.⁶³

14. The *Indoor Location Accuracy Order* requires, *inter alia*, CMRS providers to provide dispatchable location⁶⁴ or x/y coordinates⁶⁵ within 50 meters of the caller for: (1) 40 percent of all wireless 911 calls within two years of the effective date of the order (by 2017);⁶⁶ (2) 50 percent within three years (by 2018); (3) 70 percent within five years (by 2020); and (4) 80 percent within six years (by 2021).⁶⁷ With regard to vertical location, the *Indoor Location Accuracy Order* requires CMRS providers to begin delivering uncompensated barometric pressure data⁶⁸ within three years (by 2018) from any device that is capable of delivering such information.⁶⁹ Nationwide CMRS providers must also submit by 2018 a proposed z-axis metric, supported by test data, to the Commission for review and approval.⁷⁰ By 2021, nationwide CMRS providers must deploy vertical location technology (either dispatchable location or z-coordinate⁷¹ technology that meets the Commission’s approved metric) in the top 25 Cellular Market

⁵⁹ *Id.*, 30 FCC Rcd at 1260, para. 1.

⁶⁰ *Id.* at 1266-67, para. 19.

⁶¹ *Id.* at 1260, para. 3.

⁶² *Id.* at 1260, para. 4.

⁶³ *Id.*

⁶⁴ “Dispatchable location” is the verified or corroborated street address of the calling party plus additional location information such as floor, suite, apartment or similar information that may be needed to adequately identify the location of the calling party. *See id.* at 1274, para. 44.

⁶⁵ The x/y location is an alternative to dispatchable location that is the coordinate-based horizontal location. *See id.* at 1287, para. 74.

⁶⁶ *Id.* at 1261-62, para. 6; 47 CFR § 20.18(i)(2)(i). The effective date of the relevant rules not requiring PRA approval is April 3, 2015. The effective date of the relevant rules requiring PRA approval is August 3, 2015.

⁶⁷ *Id.* at 1261-62, para. 6. The 2020 and 2021 benchmarks only apply to nationwide CMRS providers.

⁶⁸ Handsets that can provide barometric pressure readings give an idea of the vertical height of the device. *See id.* at 1303-04, para. 115.

⁶⁹ *Id.* at 1261-62, para. 6; 47 CFR § 20.18(i)(2)(ii).

⁷⁰ *Id.* at 1261-62, para. 6.

⁷¹ Z-axis location refers coordinate-based vertical location, i.e., the coordinate that shows elevation. Z-axis location is an alternative to dispatchable location, which would provide floor/suite information. *See id.* at 1302-1305, paras. 112-120.

Areas (CMAs) nationwide.⁷² By 2023, nationwide CMRS providers must deploy vertical location technology in the top 50 CMAs.⁷³

15. To ensure that carriers are on track to implement improved indoor location accuracy, CMRS providers must have established a test bed by August 3, 2016, to validate technologies meeting certain requirements that are intended for indoor location, including dispatchable location technologies and those that deliver horizontal and/or vertical coordinates, in order for the test results to be considered valid for compliance purposes.⁷⁴ By February 3, 2017, nationwide CMRS providers must also file a report with the Commission detailing their implementation plan to meet the location accuracy milestones.⁷⁵

II. PROGENY'S 2015 AMENDED WAIVER REQUESTS

16. On March 27, 2015 and June 26, 2015, respectively, Progeny filed its Amended Waiver Requests, stating that the requests supersede both its 2012 and 2014 Waiver Requests.⁷⁶ The Amended Waiver Requests generally seek a Commission waiver of the first construction deadlines for most of Progeny's licenses⁷⁷ and an extension of the second construction deadlines for all of the Licenses⁷⁸ to coincide with the timelines set forth in the Commission's *Indoor Location Accuracy Order*.⁷⁹ As discussed below, the Amended Waiver Requests seek certain procedural, interim construction deadline, and end-of-term construction deadline waivers.

17. *Progeny's Procedural Waiver Requests.* Progeny requests waiver of certain Commission construction extension and electronic notification procedural requirements.⁸⁰ On November 21, 2012, Progeny filed a paper supplemental extension request (Construction Supplement) with the Secretary and therefore seeks a waiver of the requirement that supplemental extension requests be filed electronically.⁸¹ Second, Progeny seeks a waiver of the Commission's requirement that construction notifications be filed electronically within 15 days of the expiration of the applicable construction period using FCC Form

⁷² *Id.* CMAs are based on information from the 2010 Census. Appendix B of the *Indoor Location Accuracy Order* lists the top 50 CMAs.

⁷³ *Id.*

⁷⁴ *Id.* at 1307-09, paras. 126-132; 47 CFR § 20.18(i)(3)(i). This deadline is 12 months from the effective date of the rules (August 3, 2015).

⁷⁵ *Id.* at 1271, para. 37; 47 CFR § 20.18(i)(4)(i). This deadline is 18 months from the effective date of the rules requiring PRA approval (August 3, 2015). CMRS carriers are subject to other reporting and compliance measures beginning in early 2017 as described in Commission rule Section 20.18, 47 CFR § 20.18.

⁷⁶ *See supra* note 2.

⁷⁷ As discussed below, Progeny does not seek a complete waiver of the interim deadline for its top 40 EAs, but an extension of that deadline until June 21, 2013.

⁷⁸ Amendment at 2, 14. Progeny couches its request as a "consolidation" of both the interim and final construction deadlines, resulting in "a unified single milestone deadline" for its M-LMS licenses. *Id.* Given the application of the Commission's M-LMS construction rules, Progeny is in practical terms seeking a full waiver of the interim construction deadline, so that it is not at any point required to make an independent demonstration that it has met the interim one-third population coverage benchmark.

⁷⁹ *Indoor Location Accuracy Order*, 30 FCC Rcd at 1261-62, para. 6.

⁸⁰ Amendment at 11-13.

⁸¹ *See id.* at 11; 47 CFR § 1.946(e).

601.⁸² With the exception of one EA (Orlando), Progeny filed initial construction notifications for its top 40 EAs using FCC Form 601 when Progeny completed initial construction, while indicating that it was precluded from commencing commercial service. Following the Commission's grant of commercial service authority to Progeny, however, Progeny filed the June 2013 Letter in the *Progeny Commercial Service Order* docket,⁸³ but failed to file on FCC Form 601.

18. Progeny contends that waiver of this procedural rule is warranted because: (1) the underlying purpose of the rule is well served because Progeny's transmitters were constructed and capable of providing service in most of its top 40 EAs prior to the original July 19, 2012 deadline; (2) Progeny refrained from providing commercial service until it was authorized by the Commission, a situation which was beyond Progeny's control; and (3) Progeny is preparing to provide "critically needed indoor location services."⁸⁴

19. *Progeny's Interim Construction Deadlines.* With respect to its interim construction deadlines, Progeny seeks the following: (1) for its "top 40 EAs," an extension of its interim construction deadline from July 19, 2012, to June 21, 2013, the date on which Progeny notified the Commission that it had satisfied its construction requirements;⁸⁵ and (2) for all its licenses outside its "top 40 EAs," a waiver of the interim construction deadline entirely, so that the only relevant construction deadlines remaining would be the end-of-term deadlines. In its initial Waiver Request, Progeny sought an extension of 90 days for these licenses, explaining that it required additional time to complete construction and file notifications for 13 EAs in its "top 40" EAs and that it was precluded from providing commercial service.⁸⁶ Progeny filed the Construction Supplement with the Commission on November 21, 2012, noting that it had completed construction within the specified 90 day period in 39 of its top 40 EAs, but that the Commission had not yet granted it commercial authority to operate, and requested an extension of its interim deadline until 60 days after the Commission granted such commercial authority.⁸⁷ As noted above, the Commission granted Progeny commercial authority on June 6, 2013,⁸⁸ and Progeny subsequently filed the June 2013 Letter indicating that it had completed construction in each of its top 40 EAs and satisfied its interim construction obligations.⁸⁹

⁸² See *id.* at 11-12; 47 CFR § 1.946(d).

⁸³ See June 2013 Letter. In its Amendment, Progeny notes that it later used FCC Form 601 to amend its initial buildout notifications to formally update the Commission's records regarding its meeting initial construction requirements as of June 21, 2013. See Amendment at 5, n.19 & n.20.

⁸⁴ Amendment at 13.

⁸⁵ See Amendment at 3-13, Attachment B. Absent a grant of this approximately one-year extension for licenses in its top 40 EA group which Progeny asserts have been constructed, these licenses would have terminated automatically and Progeny's notifications of construction would be moot. We also note that on June 6, 2013, the Commission adopted the *Progeny Commercial Service Order*, requiring Progeny to notify the Commission when it began commercial operations pursuant to the waiver. See *Progeny Commercial Service Order*, 28 FCC Rcd at 8569, para. 30. Progeny claims that it formally notified the Commission on June 21, 2013, that it commenced commercial operations in its top 40 EAs. The Amendment seeks to align its first construction deadline for its top 40 EAs with this filing date. Amendment at 2. Alternatively, Progeny requests that the extension be granted to a date that is 60 days after an order is released in response to the filing of the Amendment. Amendment at 2, n.5.

⁸⁶ See Waiver Request at 2.

⁸⁷ See Construction Supplement at 2.

⁸⁸ See *Progeny Commercial Service Order*.

⁸⁹ See June 2013 Letter.

20. Progeny argues that its initial request for a 90 day extension was justified because Progeny was actively and diligently working to provide critical indoor location accuracy service to support E911 emergency response.⁹⁰ Progeny suggests that its November 21, 2012 supplemental request for an extension until the Commission granted Progeny commercial authority was justified because the request was based on circumstances beyond its control; i.e., Progeny could not control how long it would take the Commission to find that Progeny's location service would not cause unacceptable levels of interference to Part 15 devices and grant Progeny authority to initiate commercial operations.⁹¹ Progeny notes that the delays related to the Part 15 test process were "completely outside of Progeny's ability to control."⁹²

21. *Progeny's End-of-Term Construction Deadlines.* Progeny also requests a waiver to extend its end-of-term construction deadlines for all of its M-LMS Licenses, divided into three license groupings as follows: (1) for its "largest 23 EAs," corresponding to the top 25 CMAs,⁹³ a deadline of April 3, 2020; (2) for its "next 21 EAs," corresponding to 26-50 CMAs, a deadline of April 3, 2021; and (3) for its "remaining 71 EAs," a deadline of April 3, 2023.⁹⁴ Progeny explains that these requested deadlines are intended to align with the *Indoor Location Accuracy Order* deadlines which are linked to the top 50 CMA list.⁹⁵ The *Indoor Location Accuracy Order* establishes staggered deadlines for wireless carrier compliance with horizontal and vertical E911 location accuracy, which are based on CMA population.⁹⁶ Progeny asserts that its equipment can assist carriers in meeting the accuracy requirements, particularly indoor and vertical accuracy, and that the public interest will be served by permitting additional time to work with potential carrier customers to improve location accuracy and thereby meet the Commission's established deadlines.⁹⁷

22. With regard to the specific benchmarks, Progeny explains that the Commission's *Indoor Location Accuracy Order* established timeframes extending for eight years, with escalating requirements for horizontal and vertical location accuracy.⁹⁸ Progeny states that wireless carriers will likely be able to

⁹⁰ See Amendment at 6-8.

⁹¹ See *id.* at 8-11.

⁹² *Id.* at 10.

⁹³ Progeny notes that the number of EAs is less than 25 (the number of corresponding CMAs) because some of the largest EAs include more than one large CMA. Amendment at 10.

⁹⁴ Limited Amendment at 4, Attachments C-E. Progeny notes that, although it seeks unified milestones, all but two of its top 23 EAs and most of its next 21 EAs were covered by Progeny's initial buildout showing for its top 40 EAs. Accordingly, because the initial showing was already met for its top 40 group, the requested deadlines for the top 40 group that align with the *Indoor Location Accuracy Order* are for the second buildout showing only. See Limited Amendment at 4, n.5. Progeny states that in areas where carrier customer demand does not support coverage of two-thirds of the population by the unified deadline, it may seek to satisfy the requirement through a substantial service showing. Amendment at 26.

⁹⁵ Limited Amendment at 1-3; *Indoor Location Accuracy Order*, 30 FCC Rcd at 1344, Appendix B.

⁹⁶ *Indoor Location Accuracy Order*, 30 FCC Rcd at 1304, para. 117; 47 CFR § 20.18(i).

⁹⁷ Amendment at 14. Indeed, Progeny claims it is the only company that has demonstrated it can meet the Commission's 50 meter horizontal accuracy requirement for a high percentage of wireless E911 calls made from urban indoor environments and vertical accuracy necessary to provide E911 location in tall buildings in urban areas. See *id.* at 22-24.

⁹⁸ *Id.* at 15-16; *Indoor Location Accuracy Order*, 30 FCC Rcd at 1261-62, para. 6.

satisfy the second- and third-year benchmarks for horizontal accuracy using existing technology.⁹⁹ However, Progeny asserts that the wireless carriers are likely to need Progeny's indoor location technology to provide greater indoor penetration in heavily urban areas, "conditions corresponding with the top 25 CMAs," to meet the April 2020 fifth-year benchmark.¹⁰⁰ Thus, Progeny's first requested extension for its "Largest 23 EAs" coincides with that 2020 date.¹⁰¹ Progeny states that its largest 23 EAs correspond to the top 25 CMAs.¹⁰² Progeny indicates that the Commission's requirement that wireless carriers provide dispatchable location or compliant x/y-axis location for 80 percent of all wireless calls by 2021 is likely to expand the location accuracy needs of the carriers across all top 50 urbanized CMAs; thus, Progeny aligns its requested deadline for its "next 21 EAs," corresponding to CMAs 26-50 (for a total of the top 50 CMAs), with the sixth-year deadline.¹⁰³ Finally, Progeny expects that the eighth-year requirement of z-axis location in the top 50 CMAs will encourage CMRS providers to deploy z-axis information beyond the top 50 CMAs; thus, Progeny requests that its final construction deadline for its remaining 71 EAs be extended to April 2023, to align with the indoor location accuracy rules.¹⁰⁴

23. To support its requested waivers and extensions, Progeny contends that its buildout has been closely tied to the needs of the wireless carriers and that the actual market for its location service could not be known until the Commission adopted the accuracy requirements in the *Indoor Location Accuracy Order*.¹⁰⁵ Therefore, it would be "inequitable, unduly burdensome, and not in the public interest" to have required Progeny to undertake most of its construction prior to this point.¹⁰⁶ Because the *Indoor Location Accuracy Order* requirements "directly dictate"¹⁰⁷ its construction timeline, Progeny submits that the Commission is justified in extending the construction requirements and linking them to the wireless carriers' location accuracy requirements. Progeny adds that it has undertaken significant effort and investment to ensure that its network will be capable of meeting the Commission's E911 needs, including the installation of beacons in major cities, and remains poised to expand its coverage based on wireless carrier demand.¹⁰⁸

24. Moreover, Progeny argues, the requested extensions would serve improved indoor wireless location accuracy, a "critical public safety need,"¹⁰⁹ and that aligning its construction requirements with the location accuracy benchmarks will enable Progeny's service to remain an option for the carriers to use

⁹⁹ Amendment at 16.

¹⁰⁰ *Id.*

¹⁰¹ *Id.* By 2020, wireless carriers are required to provide either a dispatchable address solution or an x/y-axis location of within 50 meters for 70 percent of all wireless 911 calls. *See Indoor Location Accuracy Order*, 30 FCC Rcd at 1287-88, paras. 74, 77; 1292-95, paras. 89-98.

¹⁰² Limited Amendment at 4.

¹⁰³ Amendment at 17. *See Indoor Location Accuracy Order*, 30 FCC Rcd at 1287-88, paras. 74, 77; 1292-95, paras. 89-98. *See also* Limited Amendment at 4. Again, Progeny notes that the number of EAs here is less than 25 because some of the largest EAs include more than one CMA.

¹⁰⁴ Amendment at 17. *See Indoor Location Accuracy Order*, 30 FCC Rcd at 1302-05, paras. 112-120.

¹⁰⁵ Amendment at 19-20.

¹⁰⁶ *Id.* at 19.

¹⁰⁷ *Id.* at 20.

¹⁰⁸ *Id.* at 18-19.

¹⁰⁹ *Id.* at 21.

to meet their requirements.¹¹⁰ Progeny maintains that its requests are more appropriate as compared to a phased schedule based on population percentages because of the fact that construction does not take place in stages at a location, but rather, full deployment is accomplished at one time.¹¹¹

25. *Comments and Replies.* On July 14, 2015, the Amended Waiver Requests were placed on Public Notice for comment.¹¹² Three parties in addition to Progeny filed comments in response to the Public Notice.¹¹³ Of the three commenting parties, no party directly opposes the Amended Waiver Requests.¹¹⁴ API and PG&E express concern that Progeny's network could cause interference to their operations going forward and recommend that the Commission extend the previously required interference reporting obligations to monitor interference to Part 15 operations.¹¹⁵ PCSP reiterates its requests related to the *2014 M-LMS Extension Order* and argues that similarly situated licensees must be accorded comparable treatment.¹¹⁶ PCSP further requests action on its petition for reconsideration of the *2014 M-LMS Extension Order* before any action on Progeny's Amended Waiver Requests.¹¹⁷

III. DISCUSSION

26. *Standard of Review.* Licensees may request a waiver of the construction requirement pursuant to Section 1.925,¹¹⁸ or an extension of time to construct pursuant to Section 1.946(e).¹¹⁹ The Commission may grant a request for a waiver when: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and a grant of the requested waiver would be in the public interest; or (ii) in view of the unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.¹²⁰ Further, Section 1.946(e) of the Commission's rules allows for an extension of time to meet construction requirements where a licensee demonstrates that failure to meet the construction deadline is due to circumstances beyond its control, while specifying

¹¹⁰ See *id.* at 24.

¹¹¹ See *id.* at 25-26.

¹¹² See *Wireless Telecommunications Bureau Seeks Comment on Requests by Progeny LMS, LLC for Waiver and Extension of Time to Construct 900 MHz Multilateration Location and Monitoring Service Licenses*, Public Notice, 30 FCC Rcd 7267 (WTB 2015).

¹¹³ See The American Petroleum Institute (API) Aug. 3, 2015 Comments (API Comments); PCS Partners, L.P. (PCSP) Aug. 3, 2015 Comments (PCSP Comments); PG&E Corporation (PG&E) Aug. 3, 2015 Comments (PG&E Comments); PG&E Aug. 13, 2015 Reply (PG&E Reply); Progeny Aug. 13, 2015 Reply (Progeny Reply); Progeny Aug. 17, 2015 Sur-Reply (Progeny Sur-Reply).

¹¹⁴ See API Comments at 1 ("API does not take a position on whether grant of the Extension Request is warranted."); PG&E Comments at 1 ("PG&E does not oppose the Progeny Request."). Although PCSP discusses its prior request for reconsideration and clarification of the Division's *2014 M-LMS Extension Order*, it does not directly oppose Progeny's Amended Extension Requests. See PCSP Comments at 1-3.

¹¹⁵ See API Comments at 2-5; PG&E Comments at 4-6, PG&E Reply.

¹¹⁶ See PCSP Comments at 3.

¹¹⁷ *Id.*

¹¹⁸ 47 CFR § 1.925.

¹¹⁹ 47 CFR § 1.946(e).

¹²⁰ 47 CFR § 1.925(b)(3).

a number of reasons that would not justify an extension, such as a licensee's failure to obtain financing, antenna sites, or equipment.¹²¹ We note that the waiver standard and extension standards must be applied in consideration of Section 309(j), which states that the Commission shall include performance requirements to ensure prompt delivery of services, to prevent stockpiling and warehousing of spectrum by licensees, and to promote investment and deployment of new technologies and services.¹²²

27. *Progeny's B and C Block Construction Deadlines.* For the reasons and to the extent described below, we find that a conditional grant of Progeny's Amended Waiver Requests for its B and C Block licenses is warranted in the public interest pursuant to Section 1.925(b)(3) of the Commission's rules,¹²³ and we therefore extend the construction deadlines for those licenses.¹²⁴ We address Progeny's requests related to its A Block licenses separately below.¹²⁵ Specifically, we extend Progeny's initial construction deadline from July 19, 2012 to June 21, 2013 for its "top 40 EA" licenses listed in Attachment A,¹²⁶ for which it has notified the Commission of completion of initial construction.¹²⁷ As discussed below, we grant a waiver of the interim construction deadline entirely for all Progeny's remaining licenses outside its "top 40 EAs," as set forth in Attachment B, so that these licenses will only be subject to the applicable end-of-term construction deadlines. Finally, we extend the end-of-term construction deadlines for its B and C Block licenses as follows in three license groupings based substantially on the *Indoor Location Accuracy Order*:¹²⁸ (1) 21 EA licenses¹²⁹ set forth in Attachment C, corresponding to the top 25 most populous CMAs, will have an extended end-of-term construction deadline of April 3, 2020; (2) 21 EA licenses set forth in Attachment D, corresponding to the next 26-50 most populous CMAs, will have an extended end-of-term construction deadline of April 3, 2021; and (3) 71 EA licenses set forth in Attachment E outside of the top 50 CMAs will have an extended end-of-term

¹²¹ 47 CFR § 1.946(e).

¹²² 47 U.S.C. § 309(j).

¹²³ 47 CFR § 1.925(b)(3).

¹²⁴ In May 2015, Progeny filed applications for modification to consolidate licenses for a large number of its M-LMS licenses. See ULS File Nos. 0006816188 et al., filed May 26-29, 2015. Progeny states that consolidation of its B and C Block call signs would result in a single call sign for each EA in which it holds a license. We need not address these applications because Progeny withdrew each on December 2, 2016.

¹²⁵ See *infra* para. 36.

¹²⁶ Progeny's top 40 EA licenses are also set forth in the Amended Waiver Requests. See Amendment, Attachment B.

¹²⁷ See *infra* para. 39. We grant the extension of the initial deadline for the licenses on Attachment B to the Amendment to June 21, 2013 as requested, rather than to the requested alternative date of sixty days subsequent to this order, because the June 21, 2013 date coincides with the date Progeny notified the Commission that it had actually begun commercial operations using those licenses pursuant to the authority granted to it just a few weeks prior to that date. The June 21, 2013 date reflects the fact that Progeny was standing by, willing and able to provide commercial service, but for the pending Part 15 testing processes and grant of authority.

¹²⁸ Progeny requests staggered deadlines intended to align with the *Indoor Location Accuracy Order* deadlines linked to the top 50 CMA list. Limited Amendment at 1-3; *Indoor Location Accuracy Order*, 30 FCC Rcd at 1344, Appendix B.

¹²⁹ While Progeny requests an extended construction deadline until April, 2020, for 23 EA licenses (corresponding to the top 25 CMAs), it included in that total its 2 A Block licenses. We separately address Progeny's A Block licenses below as indicated and therefore extend relief discussed here to the "21" Progeny B and C Block licenses corresponding to the top 25 CMAs.

construction deadline of April 3, 2023.¹³⁰

28. Based on our review of the record and the totality of the circumstances presented in this case, we find that the underlying purpose of Section 90.155(d), to ensure that M-LMS licensees use spectrum to provide location-based services to consumers, would not be served or would be frustrated if applied here. We also find that a number of factors, taken collectively, justify relief in the public interest provided that the conditions specified below are adhered to.¹³¹ First, as discussed below, the record clearly demonstrates that Progeny's network holds the potential of offering significant public safety benefits through improved E911 indoor location accuracy and, through our conditional relief, we ensure that Progeny will have the opportunity to provide such service to wireless carriers in order for them to meet upcoming deadlines adopted in the *Indoor Location Accuracy Order*.¹³² Second, rather than seek further relief based on speculative business plans, Progeny constructed its initial position location network after designing and contracting for custom manufactured M-LMS transmitters in a spectrum band where equipment had not to date been available.¹³³ Third, after seeking and obtaining Commission certification of transmitters¹³⁴ for use on its B and C Block M-LMS spectrum,¹³⁵ Progeny began test operations on a network comprised of hundreds of beacons in 39 of its 40 largest EAs.¹³⁶ Moreover, after successful testing that resulted in a Commission grant of commercial service authority for its B and C Block Licenses, Progeny in fact commenced actual operations in its top 40 EAs.¹³⁷

¹³⁰ We note that Progeny holds separate licenses in each EA for both the B Block and C Block. Accordingly, as reflected in the Attachments to this Order and in ULS, our grant of relief in 21 EAs until 2020 is for 42 licenses; 21 EAs until 2021 is for 42 licenses; and 71 EAs until 2023 is for 142 licenses, for a total of 226 Progeny-held B and C Block M-LMS licenses.

¹³¹ See *infra* paras. 33-35.

¹³² See *Progeny Commercial Service Order*, 28 FCC Rcd at 8556-57, paras. 1, 3; *Progeny Limited Waiver Order*, 26 FCC Rcd at 16885, para. 18. The Commission has consistently considered the public safety benefits of proposed operations in granting waiver relief. See *Request of PTC-220, LLC for Waivers of Certain 220 MHz Rules*, Memorandum Opinion and Order, 24 FCC Rcd 8537, 8538, 8543, paras. 3, 13 (granting PTC-220 a five-year waiver was in the public interest because the proposed service had the capability to dramatically improve railroad safety by, *inter alia*, preventing train-to-train collisions, enforcing speed limits, and protecting roadway workers near trains, pursuant to the 2008 Rail Safety Improvement Act. See 49 U.S.C. § 20101). See also *NRTC LLC, Demonstration of Five-Year Construction Requirements and Request for Extension of Construction Deadlines*, DA 09-1459, Order, 24 FCC Rcd 8656, 8660, para. 11 (WTB MD 2009) (*NRTC Extension Order*) (extending NRTC's construction deadline, in part, due to the importance of NRTC's system in ensuring a reliable power service to the public, including consumers in rural areas, responding to weather emergencies and communicating with public safety entities).

¹³³ See *Progeny Commercial Service Order*.

¹³⁴ See Grant of Equipment Authorization, Certification, to NextNav LLC, FCC Identifier A4P-100-0004-05 (Feb. 3, 2012). The equipment authorization is for a purpose-built M-LMS beacon for operation on the M-LMS B and C Blocks. There remains no certified equipment for operation under our Part 90 M-LMS rules in the A Block.

¹³⁵ Waiver Request at 11.

¹³⁶ See Construction Supplement at 1 (notifying the Commission of commencement of test operations prior to obtaining commercial authority); Waiver Request at 16. See also *NRTC Extension Order*, 24 FCC Rcd at 8660, para. 11 (granting an extension of NRTC's construction requirement where NRTC's construction of more than 395 sites across 17 states demonstrated that it would put its licenses to effective use).

¹³⁷ See June 2013 Letter.

29. In the *Indoor Location Accuracy Order*, the Commission reiterated that improved indoor location accuracy is a critical public safety need, finding it appropriate to “implement measures designed to address public safety’s critical need for obtaining indoor location information...”¹³⁸ As a result of a significant increase in wireless calls to 911 from indoor locations, the quality of location information available to first responders has been degraded.¹³⁹ To address this critical public safety need, the Commission adopted enhanced indoor wireless location accuracy rules to improve public safety “and address the need to develop alternative technological approaches to address indoor location.”¹⁴⁰ The Commission recognized the importance of technologically neutral rules and highlighted NextNav’s¹⁴¹ technology as one of several promising options for wireless providers to use to meet their location accuracy commitments.¹⁴²

30. Extending Progeny’s construction deadlines will promote beneficial use of the spectrum and enable the NextNav equipment to remain an option for wireless carriers to improve location accuracy and satisfy the Commission’s location accuracy rules identified as a critical public safety need. We agree with Progeny that granting conditional relief serves the public interest and will “preserve the continued availability of Progeny’s service for E911 emergency response.”¹⁴³ We also find that the existence of competing technologies spurs innovation and provides choice to consumers, thereby furthering the public interest.

31. We note that in the *2014 M-LMS Extension Order*, the Division extended the construction deadlines to 2016 and 2018 for all other M-LMS licensees besides Progeny, but found no adequate justification for the substantially more extended relief requested.¹⁴⁴ In contrast, we find here that there are unique circumstances and a strong public interest justification for extending Progeny’s end-of-term construction deadlines beyond 2016 and 2018. Specifically, Progeny has sought and received a Commission waiver, actually developed equipment where none existed for M-LMS deployment, engaged in successful testing and initial deployment, and specifically committed to addressing a critical public safety need to potentially enable wireless carriers to improve their indoor location accuracy and meet the Commission’s recently adopted benchmarks in the *Indoor Location Accuracy Order*.

32. We also reject IEEE 802’s assertion that M-LMS is an obsolete technology and no longer viable as a competitive geolocation technology given the current availability of products utilizing GPS for geolocation services for outdoor applications, cellular mobile, or Wi-Fi for indoor applications.¹⁴⁵ We note that Progeny is proceeding with the launch of its commercial M-LMS network following the *Progeny Commercial Service Order*¹⁴⁶ and has developed a technology examined by the Commission’s

¹³⁸ *Indoor Location Accuracy Order*, 30 FCC Rcd at 1265, para. 15.

¹³⁹ *Id.* at 1266-67, paras. 18-19.

¹⁴⁰ *Id.* at 1266-67, para. 19.

¹⁴¹ Progeny and NextNav LLC are wholly-owned subsidiaries of NextNav Holdings LLC, previously named Progeny Holdings LLC.

¹⁴² *Indoor Location Accuracy Order*, 30 FCC Rcd at 1294-95, paras. 95-96; 1302, para. 113.

¹⁴³ Amendment at 20.

¹⁴⁴ *2014 M-LMS Extension Order*, 29 FCC Rcd at 10368, para. 18. The Division also stated that it would not consider future requests for waiver or extension of time based on claims related to lack of equipment. *Id.*

¹⁴⁵ IEEE 802 Comments at 2-3.

¹⁴⁶ *See Progeny Commercial Service Order*, 28 FCC Rcd 8555, 8561, paras. 1, 13.

Communications Security, Reliability and Interoperability Council (CSRIC). A 2013 CSRIC report found that Progeny's system demonstrated improved indoor location capabilities for E911.¹⁴⁷ We believe the existence of competing technologies spurs innovation and provides choice to consumers, thereby furthering the public interest. The fact that Progeny has continued to pursue deployment of M-LMS technology suggests that it is not, as IEEE 802 argues, obsolete. With respect to API's and PG&E's concerns that Progeny's network could cause interference to their operations going forward, and their recommendation that the Commission extend the previously required interference reporting obligations to monitor interference to Part 15 operations,¹⁴⁸ we find that these issues were previously addressed in the *Progeny Commercial Service Order*.¹⁴⁹ In that order, the Commission specifically contemplated Progeny's expansion into other geographic areas when crafting the reporting requirements and requiring ongoing interference monitoring.¹⁵⁰ Likewise, PCSP's concerns regarding comparable treatment among M-LMS licensees¹⁵¹ were raised in the PCSP Petition and are more properly addressed in that proceeding.¹⁵²

33. *Conditions.* We find it in the public interest to grant relief to Progeny for its B and C Block licenses' end-of-term construction deadlines so long as Progeny demonstrates that it is in fact supporting the wireless carriers' efforts to comply with their E911 location accuracy requirements as set forth in the *Indoor Location Accuracy Order*. Progeny's relief is therefore subject to the conditions set forth below.

34. Progeny must meet the construction deadlines established herein and timely file construction notifications acceptable to the Commission. When filing its construction notifications to demonstrate the required population coverage or substantial service, Progeny may only include coverage areas where its signal strength is sufficient for carrier compliance with the requirements established in the Commission's *Indoor Location Accuracy Order*. We remind Progeny that the relevant M-LMS licenses will terminate automatically if Progeny fails to meet these required benchmarks pursuant to Sections 1.946(c) and 1.955(a) of the Commission's rules.¹⁵³ Moreover, as an additional condition, Progeny is required to continue to provide location accuracy services on all of its B and C Block licenses for at least a five (5) year period ending April 3, 2025.¹⁵⁴ Until April 3, 2025, Progeny's B and C Block licenses may not be assigned, transferred, partitioned, disaggregated, and/or leased to any third party, unless the potential assignee, transferee, partitionee, disaggregatee, and/or lessee requests a waiver justifying continuation of the waiver relief granted herein and the Bureau grants such relief.

35. In addition, we condition the relief provided on Progeny filing periodic reports electronically in this docket, WT Docket No. 12-202, as outlined below, demonstrating its progress toward meeting the extended construction deadlines. These reports are necessary because a waiver would not be warranted

¹⁴⁷ *Id.* at 8556, para. 3.

¹⁴⁸ See API Comments at 2-5; PG&E Comments at 4-6; PG&E Reply.

¹⁴⁹ See *Progeny Commercial Service Order*.

¹⁵⁰ See *id.*, 28 FCC Rcd at 8568-69, paras. 29-31.

¹⁵¹ See PCSP Comments at 3.

¹⁵² See *supra* note 57.

¹⁵³ 47 CFR §§ 1.946(c), 1.955(a).

¹⁵⁴ This date represents five years from the April 3, 2020 end-of-term construction deadline for its 25 most populous CMAs and ensures that, for a reasonable and not unduly burdensome time period, Progeny will continue to provide service to carriers complying with the indoor location accuracy requirements.

absent a direct link between Progeny's proposed service offering and the likelihood of its carrier customers being able to benefit the public through compliance with the *Indoor Location Accuracy Order* requirements. The record reflects that each step requiring a report is a precursor to Progeny's ultimate ability to comply with its construction deadlines (e.g., handsets to market, inclusion in the test bed, agreements with carriers). This waiver terminates if we determine that any of Progeny's reports do not adequately demonstrate that each of the precursors has been accomplished, unless Progeny separately demonstrates that continuation of the waiver relief is nonetheless in the public interest. Accordingly, we require the following:

- By March 1, 2017, Progeny must file a report with the Commission that includes the following information:
 - A demonstration of its substantial progress toward bringing compatible handsets to market;
 - Identification of the carrier(s) Progeny will provide service to and a detailed plan for site deployment, testing, and activation in each license area; and
 - The date on which it commenced testing in the Indoor Location Accuracy Test Bed and, if applicable, the date testing was completed and certification was received from the Test Bed Administrator.
- If Progeny has not completed its Indoor Location Accuracy Test Bed testing by March 1, 2017, Progeny must file a report with the Commission showing the date testing was completed, including certification from the Test Bed Administrator, not later than ten (10) days following completion of testing. If Progeny did not receive certification, then it must report that additional testing is necessary and when that testing is scheduled. Upon completion of additional testing, Progeny must file a report showing the date its additional testing was completed and including its certification from the Test Bed Administrator.
- Beginning on September 1, 2017, Progeny must file semi-annual reports (by March 1 and September 1 of each year ending on March 1, 2025) detailing its progress toward deployment, testing, and activation in each market. For licenses that are past the relevant end-of-term deadline, Progeny must include in each semi-annual report a confirmation that such licenses continue to remain in operation providing location accuracy services.
- By April 2, 2019, Progeny must file a report with the Commission demonstrating that compatible handsets are commercially available in the United States.

36. *Progeny's A Block Licenses.* With regard to Progeny's two A Block licenses, we note that the Commission's grant of authority to Progeny to commence commercial operation of its M-LMS network is limited to Progeny's B and C Block licenses.¹⁵⁵ Progeny includes its two A Block authorizations in its request for waiver or extension of the construction deadlines,¹⁵⁶ but, in contrast to its B and C Block arguments, fails to demonstrate that provision of service is possible under an extended timeframe, or even that relief is needed to develop equipment for commercial operation on the A Block.¹⁵⁷ Commission records do not indicate that there is M-LMS equipment certified for operation under Part 90 of the Commission's rules on the A Block. We find that Progeny has not made any showing to justify a further extension of time to construct its two A Block licenses. Accordingly, we hereby (1) deny Progeny's waiver or extension request with regard to call signs WPQQ203 and

¹⁵⁵ See *Progeny Commercial Service Order*, 28 FCC Rcd at 8562-63, para. 17, n.45.

¹⁵⁶ Progeny includes its two A Block licenses, WPQQ203 and WPQQ254, in its largest 23 EA group with a requested construction deadline of April 3, 2020.

¹⁵⁷ See Amended Waiver Requests.

WPQQ254 and find that these licenses automatically terminated as of July 19, 2012¹⁵⁸ pursuant to Sections 1.946(c) and 1.955(a)(2) of the Commission's rules;¹⁵⁹ and (2) dismiss as moot Progeny's renewal applications for call signs WPQQ203 and WPQQ254.¹⁶⁰

37. *Procedural Waivers.* We now address Progeny's requests for procedural waivers surrounding the initial construction deadline of July 19, 2012, and Progeny's initial construction filings. In these circumstances, we find that waiver of the rule requiring electronic filing and the filing of a construction notification within fifteen days of the construction deadline, to the extent necessary, is warranted because neither the public interest nor the underlying purpose of the rule would be served by a denial of the requests for relief. Moreover, it would be inconsistent to deny the limited procedural relief requested for the licenses actually constructed in Progeny's "top 40 EAs," where we find it in the public interest, as discussed herein, to grant a complete waiver of the first construction deadline for the balance of Progeny's M-LMS licenses.

38. In addition, we note that Progeny intended to amend its prior extension requests by filing the Amended Waiver Requests in ULS. However, Progeny in fact submitted the amendments as new requests for extension, which must be filed before the expiration of the construction deadline.¹⁶¹ Progeny's Amended Waiver Requests were therefore late-filed and should have included a request for waiver. Given Progeny's explanation that it was amending and superseding its timely-filed 2012 and 2014 extension/waiver requests to provide further relevant information for Commission consideration, we hereby waive on our own motion the requirement that extension requests must be filed before the construction deadline with regard to the Amended Waiver Requests. Furthermore, this procedural waiver is warranted because neither the public interest nor the underlying purpose of the rule would be served by not extending relief in this instance.

39. *Acceptance of Construction Notifications for Progeny's Licenses Already Constructed.* As discussed, in this Order we extend the initial construction deadline for Progeny's licenses in its top 40 EAs listed on Attachment B to its Amendment to June 21, 2013, and waive the applicable electronic notification procedural requirements associated with the initial construction notification filings. Progeny had notified the Commission that, in accordance with the construction requirements for M-LMS licensees, Progeny had completed construction of its initial network in each of its top 40 EAs and had placed into operation a sufficient number of base stations to provide multilateration location service to at least one-third of the population in each EA.¹⁶² After review, we accept Progeny's initial construction notification filings, as amended, and find that Progeny has satisfied its interim construction requirements for those licenses as of June 21, 2013.¹⁶³

¹⁵⁸ See *LMS Extension Order* in which the Bureau extended Progeny's initial deadline to July 19, 2012, and final deadline to July 19, 2014.

¹⁵⁹ 47 CFR §§ 1.946(c), 1.955(a)(2).

¹⁶⁰ See ULS File Nos. 0004307406 and 0004307478.

¹⁶¹ See 47 CFR § 1.946(e).

¹⁶² See Amendment at 5, citing its June 21, 2013 letter from Bruce A. Olcott, *see supra* note 42. Progeny later used FCC Form 601 to amend its initial buildout notifications in March 2015. See Amendment at 5, n.19. Progeny notes that, for the Orlando EA, where completion of construction was delayed by a nesting eagle, the buildout notification identifying June 21, 2013 as the compliance date was filed as an initial notification and not as an amendment to a previous notification. See *id.*

¹⁶³ See Amendment, Attachment B.

40. *Renewal Applications.* In July 2010, Progeny filed applications seeking renewal of its Licenses. Warren Havens, Telesaurus, Skybridge, and other affiliated entities (collectively, Havens Petitioners) filed a petition to deny Progeny's renewal applications.¹⁶⁴ The Havens Petitioners state that the facts and arguments supporting their Renewal PTD "have been previously presented" to the Commission, referencing and attaching various past pleadings.¹⁶⁵ In sum, the Havens Petitioners reiterate their claims regarding Progeny's actions at the time of the LMS auction in 1999 and initial grant of the Licenses; namely, that Progeny did not properly win any M-LMS licenses at auction, but rather acquired the licenses by fraud, and committed other licensing and auction rule violations.¹⁶⁶ In its Opposition to the Renewal PTD, Progeny asserts that the issues raised "have long since been settled by the Commission" and that none of them were timely made, but rather were raised approximately seven years after the Commission requested public comment on the issues.¹⁶⁷ Progeny argues that the Renewal PTD is procedurally defective and contains factual and other inaccuracies.¹⁶⁸

41. We hereby dismiss the Renewal PTD as untimely and otherwise procedurally deficient. As noted in the December 1999 Public Notice, the public was given ample opportunity to object to Progeny's Form 601 and petitions to deny were required to have been filed by December 16, 1999.¹⁶⁹ No Havens Petitioner filed a timely petition to deny or comment in response to any of the various public notices leading up the grant of Progeny's Licenses in July 2000.¹⁷⁰ We also agree with Progeny that the Havens Petitioners fail to satisfy the requirement that petitions to deny "must contain specific allegations of fact sufficient to make a *prima facie* showing" that application grant is inconsistent with the public interest.¹⁷¹ The Renewal PTD does not include specific facts supporting the claims of fraud and other auction rule violations.¹⁷² Moreover, we have already addressed and dismissed as without merit a prior challenge by Warren Havens and affiliates questioning the Auction 21 process and the validity of Progeny's Licenses.¹⁷³ As we explained, the issues raised by Havens and affiliates associated with Auction 21 and

¹⁶⁴ See Petition of Warren Havens et al. to deny the Applications of Progeny LMS, LLC for renewal of Multilateration Location and Monitoring Services Economic Area Licenses, Public Notice Report No. 6012, File Nos. and Call Signs listed in Report No. 6012, leading with 0004307320 and WPQP865 (filed August 6, 2010) (Renewal PTD).

¹⁶⁵ *Id.* at 2.

¹⁶⁶ See *id.* at 2-4.

¹⁶⁷ See Opposition of Progeny to Petition to Deny Applications of Progeny LMS, LLC for renewal of Multilateration Location and Monitoring Services Economic Area Licenses, Public Notice Report No. 6012, Lead File No. 0004307320 (WPQP865) at 1-2 (filed August 19, 2010) (Opposition).

¹⁶⁸ *Id.* at 2-8. The Havens Petitioners filed a reply to the Opposition repeating arguments referenced in the Renewal Petition surrounding the auction and initial grant of the Licenses, dated August 31, 2010, and a request to accept late filing of that reply, dated September 1, 2010.

¹⁶⁹ See *Location and Monitoring Service Application Accepted for Filing*, Public Notice, 15 FCC Rcd 1591 (WTB 1999) (December 1999 Public Notice).

¹⁷⁰ *Id.*

¹⁷¹ See 47 CFR § 1.939(d), Opposition at 2-3.

¹⁷² Renewal PTD at 2-4.

¹⁷³ See *Application for Transfer of Control of Progeny LMS LLC to Progeny LMS Holdings LLC and Notification of the Consummation of the Transfer of Control of Progeny LMS LLC to Progeny LMS Holdings LLC*, Order, 27 FCC Rcd 5871, 5878-80, paras. 20-23 (WTB MD 2012) (Application for Review pending, see Telesaurus Holdings GB (continued....))

the validity of the Licenses were considered by the Bureau in granting the Licenses.¹⁷⁴ Accordingly, we dismiss the Renewal PTD. Consistent with the relief we provide today, we grant Progeny's pending renewal applications for their B and C Block Licenses on the condition that Progeny timely meet its construction requirements and all other conditions prescribed in this Order.

IV. ORDERING CLAUSE

42. Accordingly, IT IS ORDERED that, pursuant to Sections 2 and 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 152, 154(i), and Sections 0.131, 0.331, 1.925, and 90.155(d) of the Commission's rules, 47 C.F.R. §§ 0.131, 0.331, 1.925, 90.155(d), the Progeny LMS, LLC Amendment and Restatement to Requests for Waiver and Extension of Time filed March 27, 2015, as amended by the Progeny LMS, LLC Limited Amendment to Amendment and Restatement to Requests for Waiver and Extension of Time filed June 26, 2015, IS GRANTED to the extent discussed and subject to the conditions imposed herein and is otherwise DENIED.

FEDERAL COMMUNICATIONS COMMISSION

Roger S. Noel, Chief
Mobility Division
Wireless Telecommunications Bureau

(Continued from previous page) _____

LLC, Intelligent Transportation & Monitoring Wireless LLC, Environmental LLC, Verde Systems LLC, and Warren Havens, Application for Review of Bureau's May 31, 2012 Order (filed July 2, 2012)). *See also Requests of Progeny LMS, LLC and PCS Partners, L.P. for Waiver of Multilateration Location and Monitoring Service Construction Rules*, Order, 23 FCC Rcd 17250 (2008) (Petition for Reconsideration pending, *see* Petition for Reconsideration or in the Alternative Section 1.41 Request, filed Dec. 29, 2008 by Warren Havens, Telesaurus Holdings GB LLC, Skybridge Spectrum Foundation, AMTS Consortium LLC, Telesaurus VPC LLC, and Intelligent Transportation & Monitoring Wireless, LLC).

¹⁷⁴ *See id.*, 27 FCC Rcd at 5879, para. 22, citing the December 1999 Public Notice.

ATTACHMENT A

Extension of interim construction deadline to June 21, 2013

Call Sign	Market Code	Market Description	Channel Block
WPQP849	BEA003	Boston-Worcester-Lawrence-Lowe	B
WPQP850	BEA003	Boston-Worcester-Lawrence-Lowe	C
WPQP855	BEA006	Syracuse, NY-PA	B
WPQP856	BEA006	Syracuse, NY-PA	C
WPQP863	BEA010	New York-No. New Jer.-Long Isl.	B
WPQP864	BEA010	New York-No. New Jer.-Long Isl.	C
WPQP867	BEA012	Philadelphia-Wilmington-Atl. C	B
WPQP868	BEA012	Philadelphia-Wilmington-Atl. C	C
WPQP869	BEA013	Washington-Baltimore, DC-MD-VA	B
WPQP870	BEA013	Washington-Baltimore, DC-MD-VA	C
WPQP875	BEA018	Greensboro-Winston-Salem-High	B
WPQP876	BEA018	Greensboro-Winston-Salem-High	C
WPQP877	BEA019	Raleigh-Durham-Chapel Hill, NC	B
WPQP878	BEA019	Raleigh-Durham-Chapel Hill, NC	C
WPQP883	BEA023	Charlotte-Gastonia-Rock Hill,	B
WPQP884	BEA023	Charlotte-Gastonia-Rock Hill,	C
WPQP895	BEA029	Jacksonville, FL-GA	B
WPQP896	BEA029	Jacksonville, FL-GA	C
WPQP897	BEA030	Orlando, FL	B
WPQP898	BEA030	Orlando, FL	C
WPQP899	BEA031	Miami-Fort Lauderdale, FL	B
WPQP900	BEA031	Miami-Fort Lauderdale, FL	C
WPQP905	BEA034	Tampa-St. Petersburg-Clearwater	B

WPQP906	BEA034	Tampa-St. Petersburg-Clearwater	C
WPQP911	BEA040	Atlanta, GA-AL-NC	B
WPQP912	BEA040	Atlanta, GA-AL-NC	C
WPQP925	BEA049	Cincinnati-Hamilton, OH-KY-IN	B
WPQP926	BEA049	Cincinnati-Hamilton, OH-KY-IN	C
WPQP929	BEA051	Columbus, OH	B
WPQP930	BEA051	Columbus, OH	C
WPQP931	BEA053	Pittsburgh, PA-WV	B
WPQP932	BEA053	Pittsburgh, PA-WV	C
WPQP935	BEA055	Cleveland-Akron, OH-PA	B
WPQP936	BEA055	Cleveland-Akron, OH-PA	C
WPQP939	BEA057	Detroit-Ann Arbor-Flint, MI	B
WPQP940	BEA057	Detroit-Ann Arbor-Flint, MI	C
WPQP943	BEA062	Grand Rapids-Muskegon-Holland,	B
WPQP944	BEA062	Grand Rapids-Muskegon-Holland,	C
WPQP945	BEA063	Milwaukee-Racine, WI	B
WPQP946	BEA063	Milwaukee-Racine, WI	C
WPQP947	BEA064	Chicago-Gary-Kenosha, IL-IN-WI	B
WPQP948	BEA064	Chicago-Gary-Kenosha, IL-IN-WI	C
WPQP953	BEA067	Indianapolis, IN-IL	B
WPQP954	BEA067	Indianapolis, IN-IL	C
WPQP961	BEA071	Nashville, TN-KY	B
WPQP962	BEA071	Nashville, TN-KY	C
WPQP963	BEA073	Memphis, TN-AR-MS-KY	B
WPQP964	BEA073	Memphis, TN-AR-MS-KY	C
WPQP977	BEA083	New Orleans, LA-MS	B

WPQP978	BEA083	New Orleans, LA-MS	C
WPQP991	BEA096	St. Louis, MO-IL	B
WPQP992	BEA096	St. Louis, MO-IL	C
WPQP993	BEA099	Kansas City, MO-KS	B
WPQP994	BEA099	Kansas City, MO-KS	C
WPQQ212	BEA125	Oklahoma City, OK	B
WPQQ213	BEA125	Oklahoma City, OK	C
WPQQ214	BEA127	Dallas-Fort Worth, TX- AR-OK	B
WPQQ215	BEA127	Dallas-Fort Worth, TX- AR-OK	C
WPQQ218	BEA131	Houston-Galveston- Brazoria, TX	B
WPQQ219	BEA131	Houston-Galveston- Brazoria, TX	C
WPQQ224	BEA134	San Antonio, TX	B
WPQQ225	BEA134	San Antonio, TX	C
WPQQ226	BEA141	Denver-Boulder- Greeley, CO-KS-	B
WPQQ227	BEA141	Denver-Boulder- Greeley, CO-KS-	C
WPQQ234	BEA152	Salt Lake City-Ogden, UT-ID	B
WPQQ235	BEA152	Salt Lake City-Ogden, UT-ID	C
WPQQ236	BEA153	Las Vegas, NV-AZ-UT	B
WPQQ237	BEA153	Las Vegas, NV-AZ-UT	C
WPQQ242	BEA158	Phoenix-Mesa, AZ-NM	B
WPQQ243	BEA158	Phoenix-Mesa, AZ-NM	C
WPQQ246	BEA160	Los Angeles-Riverside- Orange C	B
WPQQ247	BEA160	Los Angeles-Riverside- Orange C	C
WPQQ248	BEA161	San Diego, CA	B
WPQQ249	BEA161	San Diego, CA	C
WPQQ252	BEA163	San Francisco- Oakland-San Jose	B

WPQQ253	BEA163	San Francisco- Oakland-San Jose	C
WPQQ257	BEA167	Portland-Salem, OR- WA	B
WPQQ258	BEA167	Portland-Salem, OR- WA	C
WPQQ261	BEA170	Seattle-Tacoma- Bremerton, WA	B
WPQQ262	BEA170	Seattle-Tacoma- Bremerton, WA	C

ATTACHMENT B

Waiver of interim construction deadline for non-top 40 EAs

Call Sign	Market Code	Market Description	Channel Block
WPQP845	BEA001	Bangor, ME	B
WPQP846	BEA001	Bangor, ME	C
WPQP847	BEA002	Portland, ME	B
WPQP848	BEA002	Portland, ME	C
WPQP851	BEA004	Burlington, VT-NY	B
WPQP852	BEA004	Burlington, VT-NY	C
WPQP853	BEA005	Albany-Schenectady-Troy, NY	B
WPQP854	BEA005	Albany-Schenectady-Troy, NY	C
WPQP857	BEA007	Rochester, NY-PA	B
WPQP858	BEA007	Rochester, NY-PA	C
WPQP859	BEA008	Buffalo-Niagara Falls, NY-PA	B
WPQP860	BEA008	Buffalo-Niagara Falls, NY-PA	C
WPQP861	BEA009	State College, PA	B
WPQP862	BEA009	State College, PA	C
WPQP865	BEA011	Harrisburg-Lebanon-Carlisle, P	B
WPQP866	BEA011	Harrisburg-Lebanon-Carlisle, P	C
WPQP871	BEA015	Richmond-Petersburg, VA	B
WPQP872	BEA015	Richmond-Petersburg, VA	C
WPQP873	BEA017	Roanoke, VA-NC-WV	B
WPQP874	BEA017	Roanoke, VA-NC-WV	C
WPQP879	BEA020	Norfolk-Virginia Beach-Newport	B
WPQP880	BEA020	Norfolk-Virginia Beach-Newport	C

WPQP881	BEA021	Greenville, NC	B
WPQP882	BEA021	Greenville, NC	C
WPQP885	BEA024	Columbia, SC	B
WPQP886	BEA024	Columbia, SC	C
WPQP887	BEA025	Wilmington, NC-SC	B
WPQP888	BEA025	Wilmington, NC-SC	C
WPQP889	BEA026	Charleston-North Charleston, S	B
WPQP890	BEA026	Charleston-North Charleston, S	C
WPQP891	BEA027	Augusta-Aiken, GA-SC	B
WPQP892	BEA027	Augusta-Aiken, GA-SC	C
WPQP893	BEA028	Savannah, GA-SC	B
WPQP894	BEA028	Savannah, GA-SC	C
WPQP901	BEA032	Fort Myers-Cape Coral, FL	B
WPQP902	BEA032	Fort Myers-Cape Coral, FL	C
WPQP903	BEA033	Sarasota-Bradenton, FL	B
WPQP904	BEA033	Sarasota-Bradenton, FL	C
WPQP907	BEA035	Tallahassee, FL-GA	B
WPQP908	BEA035	Tallahassee, FL-GA	C
WPQP909	BEA038	Macon, GA	B
WPQP910	BEA038	Macon, GA	C
WPQP913	BEA041	Greenville- Spartanburg-Anderson	B
WPQP914	BEA041	Greenville- Spartanburg-Anderson	C
WPQP915	BEA043	Chattanooga, TN-GA	B
WPQP916	BEA043	Chattanooga, TN-GA	C
WPQP917	BEA044	Knoxville, TN	B

WPQP918	BEA044	Knoxville, TN	C
WPQP919	BEA045	Johnson City- Kingsport-Bristol	B
WPQP920	BEA045	Johnson City- Kingsport-Bristol	C
WPQP921	BEA047	Lexington, KY-TN- VA-WV	B
WPQP922	BEA047	Lexington, KY-TN- VA-WV	C
WPQP923	BEA048	Charleston, WV-KY- OH	B
WPQP924	BEA048	Charleston, WV-KY- OH	C
WPQP927	BEA050	Dayton-Springfield, OH	B
WPQP928	BEA050	Dayton-Springfield, OH	C
WPQP933	BEA054	Erie, PA	B
WPQP934	BEA054	Erie, PA	C
WPQP937	BEA056	Toledo, OH	B
WPQP938	BEA056	Toledo, OH	C
WPQP941	BEA059	Green Bay, WI-MI	B
WPQP942	BEA059	Green Bay, WI-MI	C
WPQP949	BEA065	Elkhart-Goshen, IN-MI	B
WPQP950	BEA065	Elkhart-Goshen, IN-MI	C
WPQP951	BEA066	Fort Wayne, IN	B
WPQP952	BEA066	Fort Wayne, IN	C
WPQP955	BEA068	Champaign-Urbana, IL	B
WPQP956	BEA068	Champaign-Urbana, IL	C
WPQP957	BEA069	Evansville-Henderson, IN-KY-IL	B
WPQP958	BEA069	Evansville-Henderson, IN-KY-IL	C
WPQP959	BEA070	Louisville, KY-IN	B
WPQP960	BEA070	Louisville, KY-IN	C

WPQP965	BEA074	Huntsville, AL-TN	B
WPQP966	BEA074	Huntsville, AL-TN	C
WPQP967	BEA075	Tupelo, MS-AL-TN	B
WPQP968	BEA075	Tupelo, MS-AL-TN	C
WPQP969	BEA077	Jackson, MS-AL-LA	B
WPQP970	BEA077	Jackson, MS-AL-LA	C
WPQP971	BEA078	Birmingham, AL	B
WPQP972	BEA078	Birmingham, AL	C
WPQP973	BEA080	Mobile, AL	B
WPQP974	BEA080	Mobile, AL	C
WPQP975	BEA081	Pensacola, FL	B
WPQP976	BEA081	Pensacola, FL	C
WPQP979	BEA084	Baton Rouge, LA-MS	B
WPQP980	BEA084	Baton Rouge, LA-MS	C
WPQP981	BEA085	Lafayette, LA	B
WPQP982	BEA085	Lafayette, LA	C
WPQP983	BEA086	Lake Charles, LA	B
WPQP984	BEA086	Lake Charles, LA	C
WPQP985	BEA088	Shreveport-Bossier City, LA-AR	B
WPQP986	BEA088	Shreveport-Bossier City, LA-AR	C
WPQP987	BEA090	Little Rock-North Little Rock,	B
WPQP988	BEA090	Little Rock-North Little Rock,	C
WPQP989	BEA094	Springfield, MO	B
WPQP990	BEA094	Springfield, MO	C
WPQP995	BEA100	Des Moines, IA-IL-MO	B

WPQP996	BEA100	Des Moines, IA-IL-MO	C
WPQP997	BEA101	Peoria-Pekin, IL	B
WPQP998	BEA101	Peoria-Pekin, IL	C
WPQP999	BEA102	Davenport-Moline-Rock Island,	B
WPQQ200	BEA102	Davenport-Moline-Rock Island,	C
WPQQ201	BEA104	Madison, WI-IA-IL	B
WPQQ202	BEA104	Madison, WI-IA-IL	C
WPQQ204	BEA116	Sioux Falls, SD-IA-MN-NE	B
WPQQ205	BEA116	Sioux Falls, SD-IA-MN-NE	C
WPQQ206	BEA118	Omaha, NE-IA-MO	B
WPQQ207	BEA118	Omaha, NE-IA-MO	C
WPQQ208	BEA122	Wichita, KS-OK	B
WPQQ209	BEA122	Wichita, KS-OK	C
WPQQ210	BEA124	Tulsa, OK-KS	B
WPQQ211	BEA124	Tulsa, OK-KS	C
WPQQ216	BEA130	Austin-San Marcos, TX	B
WPQQ217	BEA130	Austin-San Marcos, TX	C
WPQQ220	BEA132	Corpus Christi, TX	B
WPQQ221	BEA132	Corpus Christi, TX	C
WPQQ222	BEA133	McAllen-Edinburg-Mission, TX	B
WPQQ223	BEA133	McAllen-Edinburg-Mission, TX	C
WPQQ228	BEA147	Spokane, WA-ID	B
WPQQ229	BEA147	Spokane, WA-ID	C
WPQQ230	BEA150	Boise City, ID-OR	B
WPQQ231	BEA150	Boise City, ID-OR	C

WPQQ232	BEA151	Reno, NV-CA	B
WPQQ233	BEA151	Reno, NV-CA	C
WPQQ238	BEA156	Albuquerque, NM-AZ	B
WPQQ239	BEA156	Albuquerque, NM-AZ	C
WPQQ240	BEA157	El Paso, TX-NM	B
WPQQ241	BEA157	El Paso, TX-NM	C
WPQQ244	BEA159	Tucson, AZ	B
WPQQ245	BEA159	Tucson, AZ	C
WPQQ250	BEA162	Fresno, CA	B
WPQQ251	BEA162	Fresno, CA	C
WPQQ255	BEA166	Eugene-Springfield, OR-CA	B
WPQQ256	BEA166	Eugene-Springfield, OR-CA	C
WPQQ259	BEA169	Richland-Kennewick- Pasco, WA	B
WPQQ260	BEA169	Richland-Kennewick- Pasco, WA	C
WPQQ263	BEA171	Anchorage, AK	B
WPQQ264	BEA171	Anchorage, AK	C
WPQQ265	BEA172	Honolulu, HI	B
WPQQ266	BEA172	Honolulu, HI	C
WPQQ267	BEA173	Guam & Northern Mariana Isl.	B
WPQQ268	BEA173	Guam & Northern Mariana Isl.	C
WPQQ269	BEA174	Puerto Rico & Virgin Isl.	B
WPQQ270	BEA174	Puerto Rico & Virgin Isl.	C
WPQQ271	BEA176	Gulf of Mexico	B
WPQQ272	BEA176	Gulf of Mexico	C

ATTACHMENT C

Extension of end-of-term deadline to April 3, 2020

Call Sign	Market Code	Market Description	Channel Block
WPQP849	BEA003	Boston-Worcester-Lawrence-Lowe	B
WPQP850	BEA003	Boston-Worcester-Lawrence-Lowe	C
WPQP863	BEA010	New York-No. New Jer.-Long Isl.	B
WPQP864	BEA010	New York-No. New Jer.-Long Isl.	C
WPQP867	BEA012	Philadelphia-Wilmington-Atl. C	B
WPQP868	BEA012	Philadelphia-Wilmington-Atl. C	C
WPQP869	BEA013	Washington-Baltimore, DC-MD-VA	B
WPQP870	BEA013	Washington-Baltimore, DC-MD-VA	C
WPQP899	BEA031	Miami-Fort Lauderdale, FL	B
WPQP900	BEA031	Miami-Fort Lauderdale, FL	C
WPQP905	BEA034	Tampa-St. Petersburg-Clearwater	B
WPQP906	BEA034	Tampa-St. Petersburg-Clearwater	C
WPQP911	BEA040	Atlanta, GA-AL-NC	B
WPQP912	BEA040	Atlanta, GA-AL-NC	C
WPQP931	BEA053	Pittsburgh, PA-WV	B
WPQP932	BEA053	Pittsburgh, PA-WV	C
WPQP939	BEA057	Detroit-Ann Arbor-Flint, MI	B
WPQP940	BEA057	Detroit-Ann Arbor-Flint, MI	C
WPQP947	BEA064	Chicago-Gary-Kenosha, IL-IN-WI	B
WPQP948	BEA064	Chicago-Gary-Kenosha, IL-IN-WI	C
WPQP991	BEA096	St. Louis, MO-IL	B
WPQP992	BEA096	St. Louis, MO-IL	C
WPQQ214	BEA127	Dallas-Fort Worth, TX-AR-OK	B

WPQQ215	BEA127	Dallas-Fort Worth, TX- AR-OK	C
WPQQ218	BEA131	Houston-Galveston- Brazoria, TX	B
WPQQ219	BEA131	Houston-Galveston- Brazoria, TX	C
WPQQ224	BEA134	San Antonio, TX	B
WPQQ225	BEA134	San Antonio, TX	C
WPQQ226	BEA141	Denver-Boulder- Greeley, CO-KS-	B
WPQQ227	BEA141	Denver-Boulder- Greeley, CO-KS-	C
WPQQ242	BEA158	Phoenix-Mesa, AZ-NM	B
WPQQ243	BEA158	Phoenix-Mesa, AZ-NM	C
WPQQ246	BEA160	Los Angeles-Riverside- Orange C	B
WPQQ247	BEA160	Los Angeles-Riverside- Orange C	C
WPQQ248	BEA161	San Diego, CA	B
WPQQ249	BEA161	San Diego, CA	C
WPQQ252	BEA163	San Francisco- Oakland-San Jose	B
WPQQ253	BEA163	San Francisco- Oakland-San Jose	C
WPQQ257	BEA167	Portland-Salem, OR- WA	B
WPQQ258	BEA167	Portland-Salem, OR- WA	C
WPQQ261	BEA170	Seattle-Tacoma- Bremerton, WA	B
WPQQ262	BEA170	Seattle-Tacoma- Bremerton, WA	C

ATTACHMENT D

Extension of end-of-term deadline to April 3, 2021

Call Sign	Market Code	Market Description	Channel Block
WPQP857	BEA007	Rochester, NY-PA	B
WPQP858	BEA007	Rochester, NY-PA	C
WPQP859	BEA008	Buffalo-Niagara Falls, NY-PA	B
WPQP860	BEA008	Buffalo-Niagara Falls, NY-PA	C
WPQP877	BEA019	Raleigh-Durham-Chapel Hill, NC	B
WPQP878	BEA019	Raleigh-Durham-Chapel Hill, NC	C
WPQP879	BEA020	Norfolk-Virginia Beach-Newport	B
WPQP880	BEA020	Norfolk-Virginia Beach-Newport	C
WPQP883	BEA023	Charlotte-Gastonia-Rock Hill,	B
WPQP884	BEA023	Charlotte-Gastonia-Rock Hill,	C
WPQP895	BEA029	Jacksonville, FL-GA	B
WPQP896	BEA029	Jacksonville, FL-GA	C
WPQP897	BEA030	Orlando, FL	B
WPQP898	BEA030	Orlando, FL	C
WPQP925	BEA049	Cincinnati-Hamilton, OH-KY-IN	B
WPQP926	BEA049	Cincinnati-Hamilton, OH-KY-IN	C
WPQP929	BEA051	Columbus, OH	B
WPQP930	BEA051	Columbus, OH	C
WPQP935	BEA055	Cleveland-Akron, OH-PA	B
WPQP936	BEA055	Cleveland-Akron, OH-PA	C
WPQP945	BEA063	Milwaukee-Racine, WI	B
WPQP946	BEA063	Milwaukee-Racine, WI	C
WPQP953	BEA067	Indianapolis, IN-IL	B
WPQP954	BEA067	Indianapolis, IN-IL	C

WPQP959	BEA070	Louisville, KY-IN	B
WPQP960	BEA070	Louisville, KY-IN	C
WPQP961	BEA071	Nashville, TN-KY	B
WPQP962	BEA071	Nashville, TN-KY	C
WPQP963	BEA073	Memphis, TN-AR-MS- KY	B
WPQP964	BEA073	Memphis, TN-AR-MS- KY	C
WPQP977	BEA083	New Orleans, LA-MS	B
WPQP978	BEA083	New Orleans, LA-MS	C
WPQP993	BEA099	Kansas City, MO-KS	B
WPQP994	BEA099	Kansas City, MO-KS	C
WPQQ212	BEA125	Oklahoma City, OK	B
WPQQ213	BEA125	Oklahoma City, OK	C
WPQQ216	BEA130	Austin-San Marcos, TX	B
WPQQ217	BEA130	Austin-San Marcos, TX	C
WPQQ234	BEA152	Salt Lake City-Ogden, UT-ID	B
WPQQ235	BEA152	Salt Lake City-Ogden, UT-ID	C
WPQQ236	BEA153	Las Vegas, NV-AZ-UT	B
WPQQ237	BEA153	Las Vegas, NV-AZ-UT	C

ATTACHMENT E

Extension of end-of-term deadline to April 3, 2023

Call Sign	Market Code	Market Description	Channel Block
WPQP845	BEA001	Bangor, ME	B
WPQP846	BEA001	Bangor, ME	C
WPQP847	BEA002	Portland, ME	B
WPQP848	BEA002	Portland, ME	C
WPQP851	BEA004	Burlington, VT-NY	B
WPQP852	BEA004	Burlington, VT-NY	C
WPQP853	BEA005	Albany-Schenectady-Troy, NY	B
WPQP854	BEA005	Albany-Schenectady-Troy, NY	C
WPQP855	BEA006	Syracuse, NY-PA	B
WPQP856	BEA006	Syracuse, NY-PA	C
WPQP861	BEA009	State College, PA	B
WPQP862	BEA009	State College, PA	C
WPQP865	BEA011	Harrisburg-Lebanon-Carlisle, P	B
WPQP866	BEA011	Harrisburg-Lebanon-Carlisle, P	C
WPQP871	BEA015	Richmond-Petersburg, VA	B
WPQP872	BEA015	Richmond-Petersburg, VA	C
WPQP873	BEA017	Roanoke, VA-NC-WV	B
WPQP874	BEA017	Roanoke, VA-NC-WV	C
WPQP875	BEA018	Greensboro-Winston-Salem-High	B
WPQP876	BEA018	Greensboro-Winston-Salem-High	C
WPQP881	BEA021	Greenville, NC	B
WPQP882	BEA021	Greenville, NC	C
WPQP885	BEA024	Columbia, SC	B
WPQP886	BEA024	Columbia, SC	C

WPQP887	BEA025	Wilmington, NC-SC	B
WPQP888	BEA025	Wilmington, NC-SC	C
WPQP889	BEA026	Charleston-North Charleston, S	B
WPQP890	BEA026	Charleston-North Charleston, S	C
WPQP891	BEA027	Augusta-Aiken, GA-SC	B
WPQP892	BEA027	Augusta-Aiken, GA-SC	C
WPQP893	BEA028	Savannah, GA-SC	B
WPQP894	BEA028	Savannah, GA-SC	C
WPQP901	BEA032	Fort Myers-Cape Coral, FL	B
WPQP902	BEA032	Fort Myers-Cape Coral, FL	C
WPQP903	BEA033	Sarasota-Bradenton, FL	B
WPQP904	BEA033	Sarasota-Bradenton, FL	C
WPQP907	BEA035	Tallahassee, FL-GA	B
WPQP908	BEA035	Tallahassee, FL-GA	C
WPQP909	BEA038	Macon, GA	B
WPQP910	BEA038	Macon, GA	C
WPQP913	BEA041	Greenville- Spartanburg-Anderson	B
WPQP914	BEA041	Greenville- Spartanburg-Anderson	C
WPQP915	BEA043	Chattanooga, TN-GA	B
WPQP916	BEA043	Chattanooga, TN-GA	C
WPQP917	BEA044	Knoxville, TN	B
WPQP918	BEA044	Knoxville, TN	C
WPQP919	BEA045	Johnson City- Kingsport-Bristol	B
WPQP920	BEA045	Johnson City- Kingsport-Bristol	C
WPQP921	BEA047	Lexington, KY-TN- VA-WV	B
WPQP922	BEA047	Lexington, KY-TN- VA-WV	C

WPQP923	BEA048	Charleston, WV-KY-OH	B
WPQP924	BEA048	Charleston, WV-KY-OH	C
WPQP927	BEA050	Dayton-Springfield, OH	B
WPQP928	BEA050	Dayton-Springfield, OH	C
WPQP933	BEA054	Erie, PA	B
WPQP934	BEA054	Erie, PA	C
WPQP937	BEA056	Toledo, OH	B
WPQP938	BEA056	Toledo, OH	C
WPQP941	BEA059	Green Bay, WI-MI	B
WPQP942	BEA059	Green Bay, WI-MI	C
WPQP943	BEA062	Grand Rapids-Muskegon-Holland,	B
WPQP944	BEA062	Grand Rapids-Muskegon-Holland,	C
WPQP949	BEA065	Elkhart-Goshen, IN-MI	B
WPQP950	BEA065	Elkhart-Goshen, IN-MI	C
WPQP951	BEA066	Fort Wayne, IN	B
WPQP952	BEA066	Fort Wayne, IN	C
WPQP955	BEA068	Champaign-Urbana, IL	B
WPQP956	BEA068	Champaign-Urbana, IL	C
WPQP957	BEA069	Evansville-Henderson, IN-KY-IL	B
WPQP958	BEA069	Evansville-Henderson, IN-KY-IL	C
WPQP965	BEA074	Huntsville, AL-TN	B
WPQP966	BEA074	Huntsville, AL-TN	C
WPQP967	BEA075	Tupelo, MS-AL-TN	B
WPQP968	BEA075	Tupelo, MS-AL-TN	C
WPQP969	BEA077	Jackson, MS-AL-LA	B
WPQP970	BEA077	Jackson, MS-AL-LA	C
WPQP971	BEA078	Birmingham, AL	B

WPQP972	BEA078	Birmingham, AL	C
WPQP973	BEA080	Mobile, AL	B
WPQP974	BEA080	Mobile, AL	C
WPQP975	BEA081	Pensacola, FL	B
WPQP976	BEA081	Pensacola, FL	C
WPQP979	BEA084	Baton Rouge, LA-MS	B
WPQP980	BEA084	Baton Rouge, LA-MS	C
WPQP981	BEA085	Lafayette, LA	B
WPQP982	BEA085	Lafayette, LA	C
WPQP983	BEA086	Lake Charles, LA	B
WPQP984	BEA086	Lake Charles, LA	C
WPQP985	BEA088	Shreveport-Bossier City, LA-AR	B
WPQP986	BEA088	Shreveport-Bossier City, LA-AR	C
WPQP987	BEA090	Little Rock-North Little Rock,	B
WPQP988	BEA090	Little Rock-North Little Rock,	C
WPQP989	BEA094	Springfield, MO	B
WPQP990	BEA094	Springfield, MO	C
WPQP995	BEA100	Des Moines, IA-IL-MO	B
WPQP996	BEA100	Des Moines, IA-IL-MO	C
WPQP997	BEA101	Peoria-Pekin, IL	B
WPQP998	BEA101	Peoria-Pekin, IL	C
WPQP999	BEA102	Davenport-Moline- Rock Island,	B
WPQQ200	BEA102	Davenport-Moline- Rock Island,	C
WPQQ201	BEA104	Madison, WI-IA-IL	B
WPQQ202	BEA104	Madison, WI-IA-IL	C
WPQQ204	BEA116	Sioux Falls, SD-IA- MN-NE	B
WPQQ205	BEA116	Sioux Falls, SD-IA- MN-NE	C

WPQQ206	BEA118	Omaha, NE-IA-MO	B
WPQQ207	BEA118	Omaha, NE-IA-MO	C
WPQQ208	BEA122	Wichita, KS-OK	B
WPQQ209	BEA122	Wichita, KS-OK	C
WPQQ210	BEA124	Tulsa, OK-KS	B
WPQQ211	BEA124	Tulsa, OK-KS	C
WPQQ220	BEA132	Corpus Christi, TX	B
WPQQ221	BEA132	Corpus Christi, TX	C
WPQQ222	BEA133	McAllen-Edinburg- Mission, TX	B
WPQQ223	BEA133	McAllen-Edinburg- Mission, TX	C
WPQQ228	BEA147	Spokane, WA-ID	B
WPQQ229	BEA147	Spokane, WA-ID	C
WPQQ230	BEA150	Boise City, ID-OR	B
WPQQ231	BEA150	Boise City, ID-OR	C
WPQQ232	BEA151	Reno, NV-CA	B
WPQQ233	BEA151	Reno, NV-CA	C
WPQQ238	BEA156	Albuquerque, NM-AZ	B
WPQQ239	BEA156	Albuquerque, NM-AZ	C
WPQQ240	BEA157	El Paso, TX-NM	B
WPQQ241	BEA157	El Paso, TX-NM	C
WPQQ244	BEA159	Tucson, AZ	B
WPQQ245	BEA159	Tucson, AZ	C
WPQQ250	BEA162	Fresno, CA	B
WPQQ251	BEA162	Fresno, CA	C
WPQQ255	BEA166	Eugene-Springfield, OR-CA	B
WPQQ256	BEA166	Eugene-Springfield, OR-CA	C
WPQQ259	BEA169	Richland-Kennewick- Pasco, WA	B

WPQQ260	BEA169	Richland-Kennewick-Pasco, WA	C
WPQQ263	BEA171	Anchorage, AK	B
WPQQ264	BEA171	Anchorage, AK	C
WPQQ265	BEA172	Honolulu, HI	B
WPQQ266	BEA172	Honolulu, HI	C
WPQQ267	BEA173	Guam & Northern Mariana Isl.	B
WPQQ268	BEA173	Guam & Northern Mariana Isl.	C
WPQQ269	BEA174	Puerto Rico & Virgin Isl.	B
WPQQ270	BEA174	Puerto Rico & Virgin Isl.	C
WPQQ271	BEA176	Gulf of Mexico	B
WPQQ272	BEA176	Gulf of Mexico	C